could not be raised. Prof. Ball deduces from these facts the following conclusions:

- 1. Spasmodic contraction of the brain-vessels may be produced by moral impressions, fear, anger, or grief, and also by the prolonged action of severe cold.
- 2. All the symptoms of organic injury of the brain may be created by functional ischæmia.
- 3. Mental disturbances of a peculiar kind, and especially lowering of intellectual power, as apart from positive insanity, may be the result of this process.
- 4. Spasmodic contraction of the brain-vessels, when once induced, may persist for a considerable length of time without producing structural changes in the nervous centres.
- 5. This morbid condition may, in certain cases, suddenly disappear, while it is not unreasonable to suppose that the converse may be equally true, and that the symptoms may culminate in rapid or even sudden death.

FATIGUE AS A CAUSE OF EPILEPSY.—Dr. B. Saloman, of Coblenz, Deutsch. Med. Wochenschr., Nos. 34 and 35, as a frequent cause of the epileptic attacks sometimes observed in persons otherwise sound and without any hereditary or other predisposition to nervous disorder, suggests mental or physical overstrain, especially the latter. He claims the functions of the nervous centres may be interfered with by muscular over-exertion in several ways, viz.: 1, by the blood circulating in them containing an excess of carbonic acid, and a deficient quantity of oxygen; 2, by the brain being inadequately supplied with oxygenated blood on account of the heart being unable to overcome sufficiently the increased resistance caused by the general muscular contraction; and 3, by the heightened reflex irritability of the brain due to the continuous irritation of the sensory nerves passing through the contracted muscles.

Muscular activity consumes oxygen and causes formation of carbonic acid, which is ordinarily gotten rid of by increased action of the lungs. But when, as in marching soldiers, the chest is embarrassed by a heavy pack, and the abdomen compressed by the sword belt, this cannot be always effected even with increased frequency of respiration. The circulation of the brain is also interfered with in other ways, by the pressure of the cravat or stock, and these, together with the altered and abnormal con-

ditions and mode of life, will serve to account for such cases when they occur in soldiers in active service or engaged in vigorous practice drill and manœuvres in time of peace. But they occur also frequently in civil life under analogous conditions, and Dr. Saloman gives brief accounts of a number of cases. They generally occur in youthful and physically not very robust individuals, who have been for one cause or another subjected temporarily to excessive fatigue.

The prognosis of these cases is relatively favorable; the epilepsy does not have very much tendency to become chronic, if the conditions are not unfavorable.

NEURASTHENIA.—Dr. C. H. Hughes, in the Alienist and Neurologist for October, publishes an article on neurasthenia, mainly consisting of excerpts from a report by Dr. Van Deusen of the Michigan Asylum in Kalamazoo, published first in 1868. In that paper, Dr. Van Deusen described and discussed quite fairly the symptoms of a large number of neurasthenic cases, and, fully recognizing the condition, named it neurasthenia. To him, therefore, as much as to Dr. Beard, belongs the honor of identifying and designating the disease.

It should be also generally known, however, that the condition has been recognized and its symptoms noted for more than a century by various writers, among whom we may mention Whytt, Swann. Frank, Stilling, etc., not to mention a host of more recent authors, and the term "neurasthenia" itself is alluded to by Dr. Beard in one of his earlier papers on the subject as an "old and almost forgotten term."

Paralysis of the Bladder.—At the session of the Verein für Natur und Heilkunde, Dresden, February 21, 1880 (rep. in Deutsche Med. Wochenschr., October 23d), Dr. Erdmann read a paper on paralysis of the bladder of which the following abstract is given.

After the speaker had given, at the beginning of his lecture, the innervation relations of the bladder both from an anatomical and a physiological standpoint, and had especially described the act of urination (according to Goltz's researches) as a reflex mechanism, and the importance of the lumbar spinal reflex centre for this function, he turned to the neuroses of the bladder, so far as these